

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1-10, 12-14, 19-28, 30-40, 42-45, and 49-57 are pending in the application, with 1, 21, 31, 51, 52, 54, 55, and 57 being the independent claims. Claims 11, 15-18, 29, 41, and 46-48 are sought to be cancelled without prejudice to or disclaimer of the subject matter therein. New claims 52-61 are sought to be added. These changes are believed to introduce no new matter, and their entry is respectfully requested. In particular, claims 52-57 are based on previously presented claims; support for claims 58-61 can be found at paragraph 0059 of the specification.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Objections to the Claims

The Examiner has objected to claims 15-18, 29, and 46-48. These claims are sought to be cancelled by the above amendment. Please note that claims 15-18 and 46-48 have been rewritten as claims 52-54 and 55-57, respectively. Claims 52-54 and 55-57 have been drafted in a manner that addresses the Examiner's objections.

Rejections under 35 U.S.C. § 112

The Examiner has rejected claims 11 and 41 under 35 U.S.C. § 112. These claims are sought to be cancelled by the above amendment.

Rejections under 35 U.S.C. § 102

The Examiner has rejected claims 1-10, 12-40, and 42-51, arguing that these claims are anticipated under 35 U.S.C. § 102(e) by U.S. Patent No. 6,208,407 to Loopstra ("Loopstra"). Independent claim 1 of the present invention teaches the step of determining

a proper focus distance for a specific region of a substrate, where the focus distance is determined using a calibration sensor. This step is not disclosed by Loopstra. As described in paragraph [0046] of page 14 of the present application, "a proper focus distance for the specific region is determined using calibration sensor 208 of calibration subsystem 200. The proper focus distance can be determined by maneuvering wafer 110 until a focus error is reduced below an acceptable threshold." Therefore, the step of determining a proper focus distance using a calibration sensor is performed by maneuvering a substrate until a focus error is reduced to an appropriate level. The calibration sensor therefore measures a focal distance.

In contrast, item 150 of FIG. 3 in Loopstra is a height sensor. The height sensor 150 is illustrated in greater detail in FIG. 4 and described in col. 14, lns. 33-52 of Loopstra. Loopstra describes how the position of a radiation spot formed by a beam is dependent on the height of the portion of the substrate surface on which the measuring beam is incident. Clearly, height sensor 150 of Loopstra measures a height. Loopstra fails to disclose measurement of a focal distance. For at least this reason, therefore, claim 1 of the present invention is not disclosed by Loopstra. Moreover, because dependent claims 2-10, 12-14, 19, and 20 necessarily include the feature of determining a proper focus distance using a calibration sensor, these dependent claims are likewise not anticipated by Loopstra.

Independent claim 21 of the present invention includes a feature of determining a proper focus distance using a first type of sensor. As discussed above, the determination of a proper focus distance is determined by maneuvering a wafer until a focus error is reduced below an acceptable threshold. While Loopstra discloses a height sensor that measures the distance to a substrate surface, Loopstra does not disclose the step of determining a focus distance. For at least this reason, independent claim 21 of the present invention is not anticipated by Loopstra. Because dependent claims 22-28 and 30 necessarily include the step of determining a proper focus distance, these dependent claims are likewise not anticipated by Loopstra.

With respect to claim 31, this claim discloses a system comprising a calibration sensor that determines a proper focus distance. As discussed above, the calibration sensor disclosed in the present invention determines focus distance by maneuvering a wafer until a focus error is reduced below an acceptable threshold. Such a calibration sensor is not

disclosed by Loopstra. Hence, claim 31 is not anticipated by Loopstra. Dependent claims 32-40, 42-45, and 49-50 necessarily include the feature of a calibration sensor that determines a proper focus distance. Because this feature is not disclosed by Loopstra, Loopstra does not anticipate these dependent claims.

Independent claim 51 of the present invention also discloses a calibration sensor to determine focus distance. As described above, the calibration sensor determines proper focus distance by maneuvering a wafer until a focus error is reduced below an acceptable threshold. No such calibration sensor is disclosed by Loopstra. Therefore, claim 51 is not anticipated by Loopstra.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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